

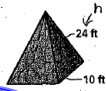
Find the slant height of the solid.



$$l^2 = 5^2 + 12^2$$

$$l^2 = \sqrt{169}$$

$$l = 13$$

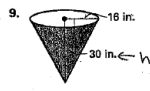


$$l^2 = 10^2 + 24^2$$

$$l^2 = 100 + 576$$

$$l^2 = 676$$

$$l = 26$$



$$l^2 = 16^2 + 30^2$$

$$l^2 = 1156$$

$$l = 34$$



$$5^2 = 3^2 + h^2$$

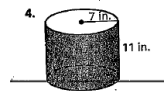
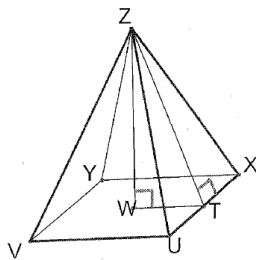
$$25 = 9 + h^2$$

$$\sqrt{16} = \sqrt{h^2}$$

$$4 = h$$

square pyramid

- What shape is the figure?
What shape is the base?
What segment is the slant height?
What segment is the height?
Name a segment that is a lateral edge.
Name a segment that is a base edge.
Name a lateral face.

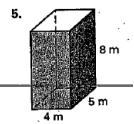


$$P = 2\pi r = 2\pi 7 = 14\pi$$

$$B = \pi r^2 = 49\pi$$

$$LA = ph = 14\pi \cdot 11 = 154\pi$$

$$SA = 154\pi + 2(49\pi) = 252\pi$$



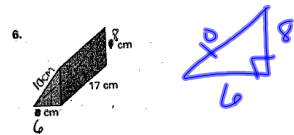
$$P = 18$$

$$B = 20$$



$$LA = P \cdot h = 18 \cdot 8 = 144$$

$$SA = LA + 2B = 144 + 2(20) = 184$$



$$P = 24$$

$$B = \frac{1}{2}bh = \frac{1}{2}6 \cdot 8 = 24$$

$$LA = 24 \cdot 17 = 408$$

$$SA = 408 + 2(24) = 456$$

7.



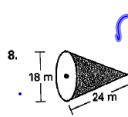
$$P = 2\pi r = 14\pi \text{ ft}$$

$$B = \pi r^2 = 49\pi \text{ ft}^2$$

$$LA = \frac{1}{2}p\ell = \frac{1}{2}14\pi \cdot 15 = 105\pi \text{ ft}^2$$

$$SA = 105\pi + 49\pi = 154\pi \text{ ft}^2$$

8.



$$r = 9 \text{ m}$$

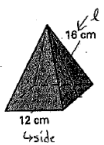
$$P = 2\pi r = 18\pi \text{ m}$$

$$B = \pi r^2 = 81\pi \text{ m}^2$$

$$LA = \frac{1}{2}p\ell = \frac{1}{2}18\pi \cdot 24 = 216\pi \text{ m}^2$$

$$SA = 216\pi + 81\pi = 297\pi \text{ m}^2$$

9.



$$P = 12 \cdot 4 = 48 \text{ cm}$$

$$B = 12 \cdot 12 = 144 \text{ cm}^2$$

$$LA = \frac{1}{2}p\ell = \frac{1}{2}48 \cdot 16 = 384 \text{ cm}^2$$

$$SA = 384 + 144 = 528 \text{ cm}^2$$

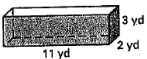
1.



$$B = \pi 6^2 = 36\pi \text{ in}^2$$

$$V = \frac{B}{3}h = 36\pi \cdot 15 = 540\pi \text{ in}^3$$

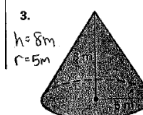
2.



$$B = 11 \cdot 2 = 22 \text{ yd}^2$$

$$V = Bh = 22 \cdot 3 = 66 \text{ yd}^3$$

3.

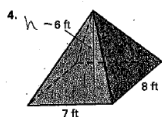


$$B = \pi 5^2 = 25\pi \text{ m}^2$$

$$V = \frac{1}{3}Bh$$

$$V = \frac{1}{3}25\pi \cdot 8$$

$$66.6\pi \text{ m}^3$$



$$B = 7 \cdot 8 = 56 \text{ ft}^2$$

$$V = \frac{1}{3}Bh = \frac{1}{3}56 \cdot 6 = 112 \text{ ft}^3$$

5. Find the surface area of the sphere. Round your answer to the nearest whole number.

$$d = 16 \text{ mm} \longrightarrow$$

$$r = 8 \text{ mm}$$



$$SA = 4\pi r^2$$

$$4\pi 64 = 256\pi \text{ mm}^2$$

6. Find the volume of the hemisphere. Round your answer to the nearest whole number.

$$V = \frac{4}{3}\pi r^3 \div 2$$



$$\frac{4}{3}\pi 5^3 \div 2$$

$$125$$

$$833\pi \text{ m}^3$$